

### **NOTICE OF ALLOWANCE**

This action is in response to papers filed May 13, 2010.

Examiner contacted Applicant's representative Mr. Larson on May 21, 2010 to discuss amendments to claim 56 to place it in better condition for allowance. Examiner suggested amending said claim "wherein the DNA probe is combination of 87 types of DNA probes consisting of SEQ ID NOS: 19 to 105 or the complement of SEQ. ID NOS: 19-105" to place claims 56, 59 and 60 in a better condition for allowance. Proposed claim amendments were sent electronically to the Applicant's representative for discussion purpose only. Applicant's representative Mr. Mueller informed the Examiner via voice mail on May 27, 2010 that the Applicant had accepted the amendments. On June 1, 2010, Mr. Muller authorized the Examiner to enter the claim amendments via Examiner's amendments and cancel claims 61-63, 66, 69 and 72. Electronic correspondence between the Applicant's representative and the Examiner is placed on record.

### ***Claim Status***

Claims 56, 59 and 60 are pending in this application and claims 61-63, 66, 69 and 72 are cancelled. After final amendments filed on May 13, 2010 are not entered. Claims 56, 59 and 60 are allowed.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided

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by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Examiner's amendments have been authorized by the Applicant's representative on June 1, 2010. The application has been amended as follows:

In the claims: Cancel claims 61-63, 66, 69 and 72.

Claims 59 and 60: No change.

Claim 56 has been rewritten as follows:

A method of judging a biological activity in an environment contaminated with an organochlorine compound that is at least one of tetrachloroethylene (PCE) and trichloroethylene (TCE), the method comprising:  
amplifying a nucleic acid extracted from an environmental sample by a gene amplification method so as to use the amplified product as a target; hybridizing the target to a DNA probe including a base sequence unique to each of 17 types of anaerobic bacteria denoted below as A to Q, which are related to degradation of the organochlorine compound, in an attempt to detect the 17 types of bacteria in the environment; and judging capability of the environment to eliminate the organochlorine compound based on degrading capability of the each of 17 types of bacteria that is detected with respect to the organochlorine compound and a dechlorinated product thereof, wherein the DNA probe is a combination of 87 types of DNA probes consisting of SEQ ID NOS: 19 to 105 or the complement of SEQ. ID NOS: 19-105, wherein each of the probe is bonded specifically to an internal transcribed spacer region of any one of the 17 types of bacteria denoted below as A to Q without occurrence of cross-

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hybridization, A: Dehalospirillum multivorans B: Desulfitobacterium frappieri C: Actinomycetales Sm- 1 (Rhodococcus sp. Sm- 1) D: Rhodococcus rhodococcus E: Xanthobacter flavus F: Mycobacterium L1G: Desulfomicrobium norvegicum (Desulfovibrio baculatus) H: Desulfitobacterium dehalogenans I: Desulfitobacterium hafniense J: Clostridium formicoaceticum K: Desulfuromonas chloroethenica L: Acetobacterium woodii DSM 1030 M: Dehalobacter restrictus N: Desulfitobacterium sp. strain PCE1 O: Desulfitobacterium frappieri TCE1 P: Acetobacterium woodii DSM 2396 Q: Desulfomonile tiedjei DCB-1.

### ***REASONS FOR ALLOWANCE***

The following is an examiner's statement of reasons for allowance:

None of the references of the record taken alone or in combination or SEQ ID search results either teach or suggest or obviate a method of judging a biological activity in an environment contaminated with an organochlorine compound wherein the DNA probe is a combination of 87 types of DNA probes consisting of SEQ ID NOS: 19 to 105 or the complement of SEQ. ID NOS: 19-105, wherein each of the probe is bonded specifically to an internal transcribed spacer region of any one of the 17 types of bacteria denoted below as A to Q without occurrence of cross-hybridization. Furthermore, Applicants have made persuasive arguments that art of the record do not teach SEQ ID NOS 19-105 or would not be obvious generate said combination of probes (Remarks, pgs. 6-8).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Claims 56, 59 and 60 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Narayan K. Bhat whose telephone number is (571)-272-5540. The examiner can normally be reached on 8.30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached on (571)-272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Narayan K. Bhat/

Examiner, Art Unit 1634

/Stephen Kapushoc/

Primary Examiner, Art Unit 1634